

Science

Dave's Jungle

If It Moves, It's Food

Phyllis, Tracey, Oscar, Gus and Seamus slithered, crawled and hopped their way into the Lecture Theatre on the 17th November to the simultaneously awestruck and fearful First Years.

Your eyes are not mistaken, that is Seamus the python being held by the First Years and he likes to snack on rabbits and whole chickens, rats are for starters. Gus was a sibling of Seamus' and, at only a couple of metres in length, was a more palatable pet. Tracey

elicited shrieks of terror from some students as the tarantula tiptoed across students' palms. Oscar, a tree frog, demonstrated his kinaesthetic ability by hopping nimbly out of his box. While all of this was happening, Phyllis the lizard quietly made her way to the door where she began to sun herself. Dave's Jungle really lives up to its billing!

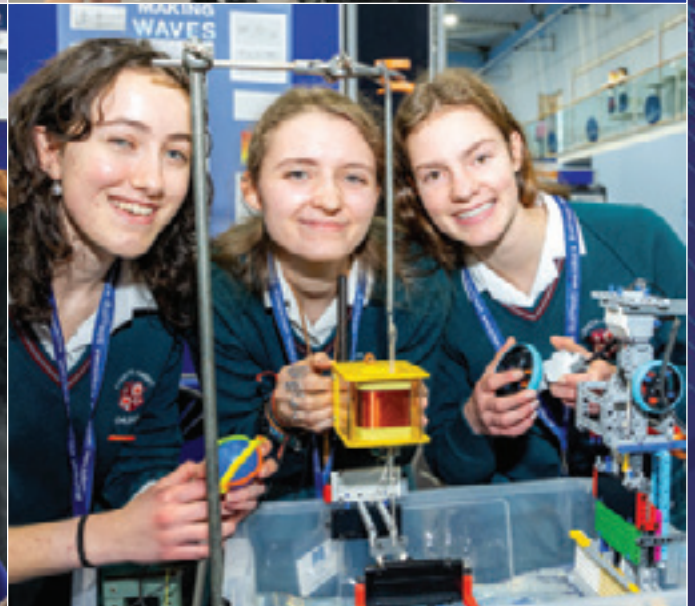
Thank you to Ms. Moore and the Science Department for organising this memorable event.





Science Week 2023

Making Waves at SciFest



This year, Rebecca Cullen, Clementine van Steenberg and I took part in the National Final for Scifest 2024. Last year, we won in the Regional Competition in the category of Renewable Energy for our wave power simulator, which we built from scratch using lego, showing how accessible wave energy really is.

In order to do well in the National Final, we wanted to do more than just simulate wave power. We wanted to show how it could be practically applied to our school, given that we are right beside such a powerful resource. Our aim was to discover if we would be able to power a plug socket with our device, as a first step towards a greener future in our school.

In order to do this we needed to show how we would convert our energy from AC to DC using a full-wave rectifier and convert the electrical energy to a suitable

voltage using a transformer. We developed a plan for how we would implement it in the school in theory, and presented our work to the judges, explaining how we would further develop it to generate more power. During the competition, we met all of the other participants and saw their projects, and met representatives from EirGrid and Intel who both sponsored the competition. Last year's winners gave a presentation about their project which had the whole auditorium cracking up, with stories of their trip to America at the International Final. We were delighted to win the National Final in our category. Thank you to Mr. Cullen, Anna O'Regan Mills, Eleanor Foot, Eva MacGinley and Kateryna Skorokhod who helped make this project possible.

FREYJA CLEARY
SIXTH YEAR



Biology

*'Biology is the most powerful technology ever created.
DNA is Software, Protein is Hardware, Cells are factories.'*

ARVIND GUPTA



Throughout the year our Senior students delved into the broad and brilliant study of life. From exploring enzymes, researching ribosomes and studying stomata, we can truly say thanks a 'Myelin' to our fantastic Biology teachers.

In May our fearless Fifth Years braved the elements and truly immersed themselves in their Ecology Field Study of Sandycove beach, carrying out qualitative and quantitative studies of the flora and fauna of our local rocky seashore. Our Sixth Year classes cracked the genetic code when they learnt all about our DNA,

even going as far as isolating DNA from kiwi! These excellent educational experiences would not have been possible without our sensational Science Department especially Ms. D. Butler, Ms. P. Butler, Ms. Scott and Mrs. Moore.

Thank you for continuing to support and inspire so many young women to pursue their passion in Science and become the future women in STEM.

ANNA WEIR
SIXTH YEAR

Physics



It was a productive two years for the six of us (seven if you include Mr. Cullen) in the Physics class. Not only did we finish the entire course in February of Sixth Year and spend the following three months going over it all again, we also went on a trip to Intel, where we got to look around their labs, we spent a day at a 'Walton Club' workshop to celebrate 300 years of

Physics at Trinity and we worked together to submit a project about the potential wave power that may (one day) power the school, which went on to win an award at the national SciFest Final.

Although we got everything done that we needed to get done, we also managed to have a lot of fun while



doing it, which may sound unlikely, but it turns out that Physics is nowhere near as scary as it may seem. While yes, there are lots of long formulae and strange words, and yes, there are some concepts which may boggle your mind and make you rethink everything, it is also extremely interesting to learn how the things around us work, whether that is how the moon stays in the Earth's orbit or how nuclear fission occurs. While many of our experiments did not always necessarily provide us with perfect results, they helped to enrich our understanding of the principles we were learning

about, as did the occasional game of 'Phyctionary' (Physics pictionary).

Altogether, studying Physics proved to be highly enjoyable (although occasionally challenging), I think we would all agree that it was extremely beneficial and will really help us next year as we pursue STEM courses in college.

ANNA O'REGAN MILLS
SIXTH YEAR

Chemistry



Before Fourth Year I wasn't sure what Chemistry was but picking it for Leaving Cert was a great decision. There are so many aspects to the course, something for everyone. There's Maths, interesting experiments, organic Chemistry and much more!



Chemistry has been such an interesting subject and I looked forward to every class I had!

LAURA STAPLETON
SIXTH YEAR

Applied Maths

Applied Maths is, in simple terms, applying Maths to the real world, whether that is calculating the speed of a race car as it goes around a track or figuring out the quickest route from Dublin to Cork. To most, the thought of having Applied Maths last class on a Friday afternoon may not sound terribly appealing, but with the introduction of a baking rota, we (including Mr E. Murphy) took it in turns to make sure that we always had something sweet to snack on as we did our work and although we had the smallest Applied Maths class that the school has ever seen (3 people), it just meant we had even more opportunities to ask questions and ensure that we fully understood each topic that we covered.

Being only the second group of Sixth Years to sit the new Applied Maths course, we had limited past papers to work with for certain parts of the course, so when it came to 'Networks and Graphs', we had to do the few that we had and hope for the best. On the other hand, topics such as 'Circular Motion' and 'Projectiles' haven't changed since the introduction

of Applied Maths in the 60s, so there was an almost limitless supply of exam questions for us to do.

In January/February of this year, we spent about 4 weeks working on our projects, which were worth 20% of our overall Leaving Cert grades. For our projects, we had to design a roller coaster, which although at first seemed like a very daunting task, actually turned out to be an enjoyable project. It was especially satisfying to see all of the elements from different parts of the course coming together in a real life situation.

All in all, I think that the three of us would agree that we are very glad that we chose to study Applied Maths. It provided us with a very good understanding of many fundamental building blocks which we will be glad to have next year as we embark on our college journeys in STEM areas.

ANNA O'REGAN MILLS
SIXTH YEAR